APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/022,594	12/20/2001	Satoshi Kamiya	396290/00	6179

21254	7590	08/23/2006

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EXAMINER
HOM, SHICK C

ART UNIT	PAPER NUMBER
2616	

DATE MAILED: 08/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	**Applicant(s)**
Office Action Summary	10/022,594	KAMIYA ET AL.
	Examiner	**Art Unit**	
	Shick C. Hom	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>24 July 2006</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-52</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) <u>5-13 and 31-39</u> is/are allowed.

6)☒ Claim(s) <u>1,2,4,14,16-25,27,28,30,40 and 42-51</u> is/are rejected.

7)☒ Claim(s) <u>3,15,26,29,41 and 52</u> is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All b)☐ Some * c)☐ None of:

      1.☒ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1.   A request for continued examination under 37 CFR 1.114,

including the fee set forth in 37 CFR 1.17(e), was filed in this

application after final rejection.   Since this application is

eligible for continued examination under 37 CFR 1.114, and the

fee set forth in 37 CFR 1.17(e) has been timely paid, the

finality of the previous Office action has been withdrawn

pursuant to 37 CFR 1.114.   Applicant's submission filed on

7/24/06 has been entered.

Response to Arguments

2.   Applicant's arguments with respect to claims 1-52 have been

considered but are moot in view of the new ground(s) of

rejection.

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which

forms the basis for all obviousness rejections set forth in this

Office action:

> (a) A patent may not be obtained though the invention is not identically
> disclosed or described as set forth in section 102 of this title, if the
> differences between the subject matter sought to be patented and the prior
> art are such that the subject matter as a whole would have been obvious at

the time the invention was made to a person having ordinary skill in the
art to which said subject matter pertains. Patentability shall not be
negatived by the manner in which the invention was made.

4.   This application currently names joint inventors. In
considering patentability of the claims under 35 U.S.C. 103(a),
the examiner presumes that the subject matter of the various
claims was commonly owned at the time any inventions covered
therein were made absent any evidence to the contrary.
Applicant is advised of the obligation under 37 CFR 1.56 to
point out the inventor and invention dates of each claim that
was not commonly owned at the time a later invention was made in
order for the examiner to consider the applicability of 35
U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior
art under 35 U.S.C. 103(a).

5.   Claims 1-2, 4, 14, 16-25, 27-28, 30, 40, and 42-51 are
rejected under 35 U.S.C. 103(a) as being unpatentable over Brock
et al. (6,510,156) in view of Enrique Hernandez-Valencia, Lucent
Technologies, "Generic Framing Procedure (GFP) Specification,"
October 9-13, 2000.

Regarding claims 1-2, 4, 16-17, 27-28, 30, 42-43:

Brock et al. disclose a frame transfer apparatus for
transferring a frame over a network, comprising an FCS
generation section that generates, when said frame is generated

and sent by said frame transfer apparatus, an FCS (Frame Check

Sequence) using a payload field, without a payload header, of

said frame as a generation target area and adds this FCS to an

FCS field of said frame as in claims 1-2, 4, 27-28, 30 and a

packet extraction section that terminates the frame of the

subnetwork that stores a packet to be stored in the payload

field of said frame and extracts said packet from the frame of

said subnetwork and wherein said packet extraction section

extracts said packet by removing unnecessary overhead for said

subnetwork from the frame of said subnetwork as in claims 16,

17, 42, 43 (see col. 4 lines 17-60 which recite apparatus for

data stream optimization whereby while propagating cells a

portion of the cell preferably the header or certain fields of

the header or just one field is saved and then as subsequent

cells are transmitted and if their headers are the same as the

saved header only their payloads are send and wherein data

checks being performed on the payload only clearly reads on

generating FCS using payload field without a payload header and

the packet extraction section as claimed).

Regarding claims 18, 19, 44, 45:

Brock et al. disclose wherein said subnetwork is Ethernet

and wherein said packet extraction section extracts said packet

from the payload of the Ethernet frame of said Ethernet (see

col. 1 line 63 to col. 2 line 10 which recite the use of ADSL

technology over twisted-pair telephone lines clearly anticipate

the Ethernet subnetwork).

Regarding claims 22, 48:

Brock et al. disclose further comprising a generic frame

transmission section that stores said generic frame in a layer 1

frame which is the first layer frame of an OSI reference model

accommodating said generic frame in said generic network and

sends said layer 1 frame storing said generic frame from an

appropriate output port of said generic frame transfer apparatus

to said generic network (see col. 1 lines 35-52 which recite

using the OSI reference model).

For claims 1-2, 4, 14, 16-25, 27-28, 30, 40, 42-51, Brock

et al. disclose all the subject matter of the claimed invention

with the exception of wherein the generic frame being a GFP

(Generic Frame Procedure) frame as in claims 1, 27; wherein said

GFP frame is a GFP ring frame as in claims 14, 40; wherein said

subnetwork comprises a POS (Packet Over SONET) as in claims 20,

46; wherein said packet extraction section extracts said packet

from the payload of the HDLC frame of said POS as in claims 21,

47; further comprising a GFP frame transmission section that

stores said GFP frame in a layer 1 frame which is the first

layer frame of an OSI reference model accommodating said GFP

frame in said GFP network and sends said layer 1 frame storing

said GFP frame from an appropriate output port of said GFP frame

transfer apparatus to said GFP network as in claims 22, 48;

wherein a SONET (Synchronous Optical NETwork) is used as the

first layer of said OSI reference model as in claims 23, 49;

wherein said GFP frame transmission section stores said GFP

frame in the payload of the SONET frame of said SONET and sends

said SONET frame storing said GFP frame to said GFP network as

in claims 24, 50; and wherein an OTN (Optical Transport Network)

is used as the first layer of said OSI reference model as in

claims 25, 51.

Enrique from the same or similar fields of endeavor teach

that it is known to provide the generic frame being a GFP

(Generic Frame Procedure) frame (see Fig. 2 which show the

standard GFP frame format); wherein said GFP frame is a GFP ring

frame (see page 9, section 5.5.2 which recite the use of ring

frame); wherein said subnetwork comprises a POS (Packet Over

SONET) (see page 3 section 1 which recite the use of SONET

network); wherein said packet extraction section extracts said

packet from the payload of the HDLC frame of said POS; wherein a

SONET (Synchronous Optical NETwork) is used as the first layer

of said OSI reference model (see page 3 section 1 of Enrique

which recite the use of SONET network); wherein said GFP frame

transmission section stores said GFP frame in the payload of the

SONET frame of said SONET and sends said SONET frame storing

said GFP frame to said GFP network; and wherein an OTN (Optical

Transport Network) is used as the first layer of said OSI

reference model (see page 3 section 1 which recite the use of

SONET network).

Thus, it would have been obvious to the person having

ordinary skill in the art at the time the invention was made to

provide the generic frame being a GFP (Generic Frame Procedure)

frame and wherein said GFP frame is a GFP ring frame; wherein

said subnetwork comprises a POS (Packet Over SONET); wherein

said packet extraction section extracts said packet from the

payload of the HDLC frame of said POS; further comprising a GFP

frame transmission section that stores said GFP frame in a layer

1 frame which is the first layer frame of an OSI reference model

accommodating said GFP frame in said GFP network and sends said

layer 1 frame storing said GFP frame from an appropriate output

port of said GFP frame transfer apparatus to said GFP network;

wherein a SONET (Synchronous Optical NETwork) is used as the

first layer of said OSI reference model; wherein said GFP frame

transmission section stores said GFP frame in the payload of the

SONET frame of said SONET and sends said SONET frame storing

said GFP frame to said GFP network; and wherein an OTN (Optical

Transport Network) is used as the first layer of said OSI

reference model as taught in Enrique in the communications

device and method of Brock et al. The generic frame being a GFP

(Generic Frame Procedure) frame and the FCS (Frame Check

Sequence) of said GFP frame when input to said GFP frame

transfer apparatus can be implemented by substituting the GFP

generic framing procedure format of Enrique for the generic

frame format of Brock et al. The GFP frame being a GFP ring

frame; wherein said subnetwork comprises a POS (Packet Over

SONET); wherein said packet extraction section extracts said

packet from the payload of the HDLC frame of said POS; further

comprising a GFP frame transmission section that stores said GFP

frame in a layer 1 frame which is the first layer frame of an

OSI reference model accommodating said GFP frame in said GFP

network and sends said layer 1 frame storing said GFP frame from

an appropriate output port of said GFP frame transfer apparatus

to said GFP network; wherein a SONET (Synchronous Optical

NETwork) is used as the first layer of said OSI reference model;

wherein said GFP frame transmission section stores said GFP

frame in the payload of the SONET frame of said SONET and sends

said SONET frame storing said GFP frame to said GFP network; and

wherein an OTN (Optical Transport Network) is used as the first

layer of said OSI reference model can be implemented by

substituting the SONET ring network of Enrique for the network

of Brock et al. The motivation for using the GFP generic

framing procedure format and SONET ring network as taught in

Enrique in the communication device and method of Brock et al.

being that it provides more efficiency for the system since the

system uses a standard format for transferring frame over the

network and the added feature of using a SONET ring network.

Allowable Subject Matter

6.   Claims 5-13 and 31-39 are allowed.

7.   Claims 3, 15, 26, 29, 41, and 52 would be allowable if

rewritten to include all of the limitations of the base claim

and any intervening claims.

Conclusion

8.   The prior art made of record and not relied upon is

considered pertinent to applicant's disclosure.

Okada et al. disclose a packet exchange data transmission

system.

Clauberg discloses packet-processing apparatus and packet switch

adapter for the processing of variable-length packets and a

method thereof.

Krishna et al. disclose an arrangement for transmitting data

packet from a media access controller across multiple physical

links.

Nonaka et al. disclose a data communication apparatus.

9.   Any inquiry concerning this communication or earlier

communications from the examiner should be directed to Shick C.

Hom whose telephone number is 571-272-3173. The examiner can

normally be reached on Mon-Fri.

    If attempts to reach the examiner by telephone are

unsuccessful, the examiner's supervisor, Seema Rao can be

reached on 571-272-3174. The fax phone number for the

organization where this application or proceeding is assigned is

571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SH   SH

SEEMA S. RAO   8/21/06
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